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# Research Report

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U.S. Army Medical Research Unit-Europe, Walter Reed Army Institute of Research # 29

U.S. Army Medical Research and Materiel Command

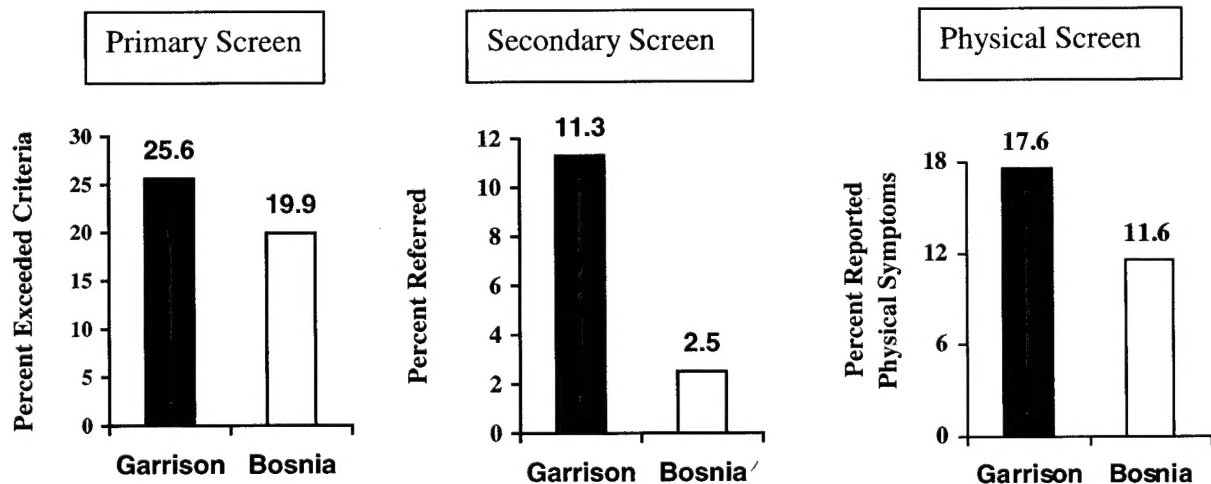
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CMR 442, APO AE 09042-1030

## The Physical and Psychological Status of Soldiers in Garrison Compared to Military Personnel in Bosnia

Between April and July 1998, the U.S. Army Medical Research Unit-Europe (USAMRU-E) administered physical and psychological screening measures to 790 soldiers at 10 U.S. Army posts in Germany. Eleven different Garrison companies participated. The purpose of this study was to compare the physical and mental health status of soldiers in Garrison to those active duty army personnel redeploying from the Bosnia area of operations. In order to make meaningful comparisons, the USAMRU-E selected the same battery of measures used in the Joint Medical Surveillance Program to screen military personnel redeploying from Bosnia. This report summarizes results obtained from comparing Garrison data with Bosnia data collected between November 1997 and March 1998 from 41,992 redeploying soldiers.

**Background:** There were three components to the psychological screening. (1) Soldiers completed a **primary screen** consisting of three psychological scales that measure symptoms of post-traumatic stress, depression, and alcohol abuse. (2) Soldiers who exceeded criteria on any of these scales completed secondary **screen interviews** conducted by trained mental health personnel. (3) Secondary interview results determined whether to **refer** soldiers for follow-up mental health services. The physical screening procedure consisted of items that assessed general physical health. In the Garrison study the Health Symptom Survey (HSS) was added, but not used in making comparisons. The 11 Garrison units assessed were comprised of 4 Combat Arms, 2 Combat Support, and 5 Combat Service Support companies.

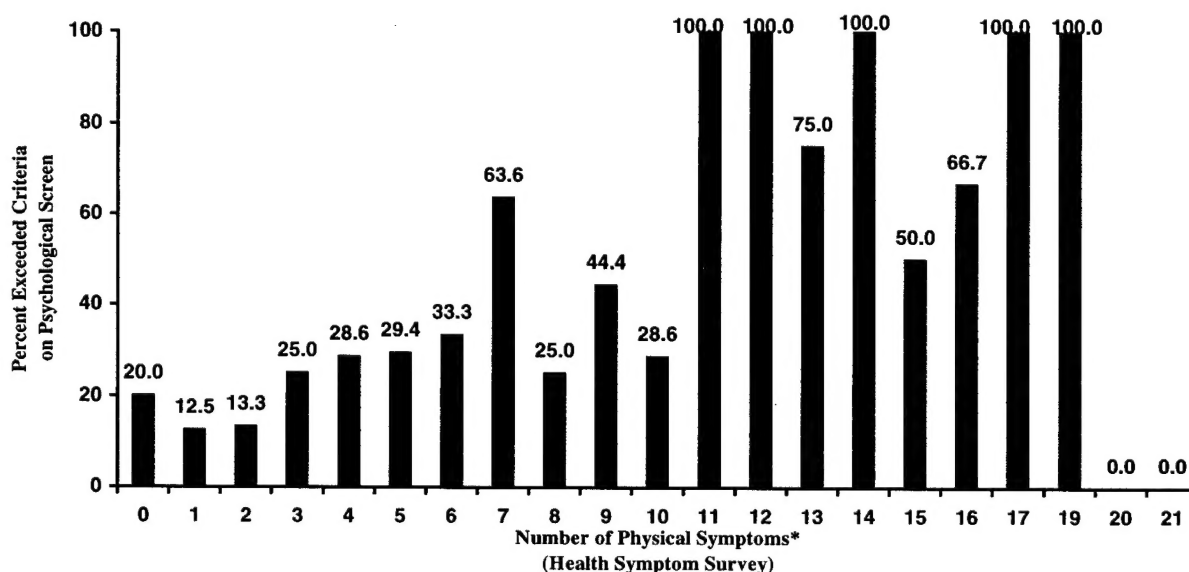
**Findings:** Overall, service members deploying from Bosnia reported fewer psychological and physical symptoms than those in Garrison. In the Garrison sample, 25.6% exceeded established criteria on at least one of the psychological scales compared to 19.1% of the Bosnia sample. The Garrison sample also had a higher rate of psychological referrals (11.3%) than the Bosnia sample (2.4%). Similarly, 17.6% of a sample of soldiers in Garrison reported physical symptoms (fever, swelling, rash, urinary problems) compared to 11.6% of a sample of soldiers in Bosnia.



**Other key findings** are summarized as follows:

- More soldiers in the Garrison sample exceeded criteria on the post-traumatic stress and depression scales than in the Bosnia sample. Differences were primarily found among junior-enlisted soldiers.
- Rates on the alcohol screening scale were similar between the two samples.
- In the Garrison sample, more soldiers who had **never** deployed to Bosnia exceeded criteria on the post-traumatic stress and depression scales than soldiers who had **previously** deployed to Bosnia.
- Of the Garrison soldiers who received a secondary interview, 11.2% requested to speak with a counselor (3.0% of the total sample). Bosnia data were similar (10.1% of those interviewed; 1.9% of total sample).

Furthermore, findings from a sample of Garrison soldiers show a link between psychological and physical health. The more physical symptoms soldiers reported, the more likely they were to exceed criteria on the primary psychological screen (see chart below), and also the more likely they were to receive a referral for mental health follow-up.



\* No one reported 18 symptoms

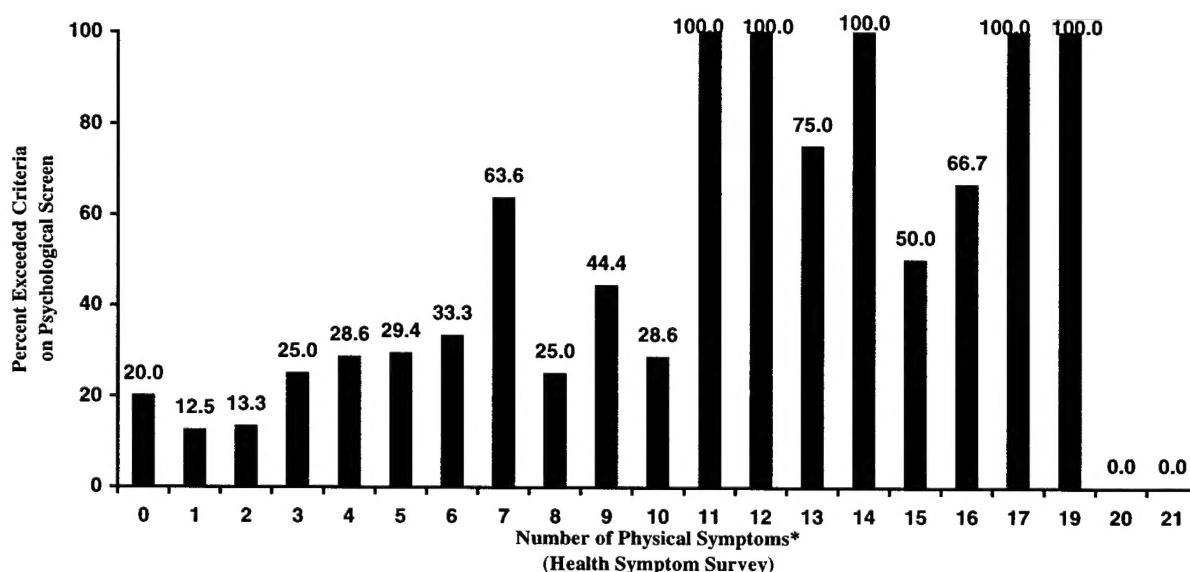
**Conclusions:** Although service members from Bosnia reported fewer psychological and physical symptoms than soldiers in Garrison, screening results indicated an overall psychological and physical readiness for both groups. This study establishes, for the first time, Garrison mental health norms and compares them to mental health norms obtained from the Joint Medical Surveillance Program in Bosnia. In addition, it shows that a proactive screening program serves as a valuable means of self-referral and early detection, and as such, may contribute to the prevention of more serious physical and psychological problems. Moreover, this study demonstrates that there is a link between psychological and physical health. Finally, this study indicates that there are positive health aspects related to deployment, as soldiers with deployment experience reported fewer physical and psychological problems than soldiers without deployment experience.

**Reference:** Castro, C.A., Adler, A.B., Huffman, A.H., & Bienvenu, R.V. (1998, September 8). **The Physical and Mental Health Status of Soldiers in Garrison Compared to Military Personnel in Bosnia.** USAMRU-E Technical Brief. For more information, contact MAJ Carl A. Castro, Commander, USAMRU-E, DSN 371-2626; Commercial (49) 6221-17-2626. This research report was prepared by Jack F. Martinez, Psy.D., USAMRU-E. Website: [www.hqusaureur.army.mil/MedicalResearchUnit/page2.htm](http://www.hqusaureur.army.mil/MedicalResearchUnit/page2.htm)

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